

terior, low, rounded, scarcely or little elevated over the hinge margin, approximate; surface with moderate to rather coarse, irregular striae, and usually a few coarser lines of growth, shining; color light yellowish horn, to straw or slightly reddish; shell rather thin, somewhat translucent; hinge rather fine, plate narrow; cardinal teeth well formed, the right one strongly curved, or angular, its posterior part thickened, simple, or grooved, or split in two diverging parts; the left anterior is angular, the posterior is oblique, slightly curved, short to rather long; lateral teeth rather small, little projecting into the cavity of the mussel, but well formed, the cusps short, pointed; ligament moderate.

Long. 5, alt. 4.4, diam. 2.5 (New York and some Ohio exs.).

Long. 5.5, alt. 4.8, diam. 3.4 (large Ohio ex.).

Habitat: Canaseraga river, N. Y.; Garrettsville, Ohio, in a swamp.

A lot of good specimens, from the former place, were kindly sent by Mr. Hy. Prime, in 1894, and then regarded as new, yet retained, as it might have proved to be a local form of some other species. Last fall Mr. Streator and the writer collected some specimens of exactly the same *Pisidium*, in a dried up swamp near Garrettsville, Ohio, the mussels living and propagating in the damp muck, under dead leaves, etc. Later on we found that Mr. Streator had collected quite a number during several years previous.

Our species is well characterized, and can not be mistaken for any other *Pisidium*. *P. roperi*, with nearly the same color and surface appearance, is larger, more elongate, much more inflated, its beaks are higher and more voluminous in the adult. I take pleasure in naming the present species after Mr. Geo. J. Streator, an enthusiastic conchologist, who has, for many years, collected and studied the mollusca of northeastern Ohio.

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**SHELLS OF THE MARL-DEPOSITS OF AROOSTOOK COUNTY, MAINE, AS  
COMPARED WITH THE LIVING FORMS IN THE SAME LOCALITY.**

BY OLOF O. NYLANDER.

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In the part of Aroostook county underlaid by the Aroostook limestone of Niagara age, there are many deposits of shell marl. I have only examined two localities: Barren Brook Bog, in Caribou, and Lovely Brook Bog, in Fort Fairfield.

Barren Brook Bog, in Caribou, is covered by vegetation; but the Lovely Brook Bog is wet, dangerous and difficult to approach, excepting in one place.

I have just received from Mr. Bryant Walker a paper upon the "Shells of the Marls of Huron County," reprinted from the Geological Survey of Michigan, Vol. VII, part II, pp. 247-252, in which comparisons are made with specimens from Aroostook county, Maine. To my knowledge there has been no extensive list published of the shells found in the marl deposits of Maine, and no comparison made with the living species in the same localities.

Samples of marls have been sent to me from Presque Isle, Limestone, California Town, in New Brunswick, Canada, and other places. The most abundant species are *Limnæa desidiosa*, *Planorbis parvus* and *Pisidium contortum*,<sup>1</sup> in all the localities.

*Fossils in the Marl of Barren Brook Bog.*

*Vertigo* sp. Fragments only.

*Succinea obliqua* Say. Rare.

*Succinea ovalis* Gld. Rare.

*Physa heterostropha* Say. Rare.

*Limnæa desidiosa* Say. Abundant.

• *Planorbis trivolvis* Say. Common.

*Planorbis companulatus* Say. Rare.

*Planorbis bicarinatus* Say. Rare.

*Planorbis parvus* Say. Abundant.

*Planorbis* (?). One specimen related to *P. crista* Lin., probably a new species.

*Ancylus parallelus* Hald. Two specimens only.

*Valvata sincera* Say (?). Not common.

*Anodonta fragilis* Lam. Rare.

*Sphærium simile* Say. Rare.

*Sphærium rhomboidium* Say. Rare.

*Calyculina securis* Prime (?). Rare.

*Pisidium adamsi* Prime. Few.

*Pisidium compressum* Prime. Few.

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<sup>1</sup> Dr. V. Sterki has kindly examined all the *Pisidia* in my collection. Some of the specimens are still held by him, pending the receipt of more material for comparison with specimens from other parts of America and Europe. I am under the greatest obligations to him, and also to Mr. Bryant Walker, for valuable information.

*Pisidium contortum* Prime. Abundant.

*Pisidium pauperculum* Sterki. Rare.

*Pisidium rotundatum* Prime. Not common.

*Pisidium scutellatum* Sterki (?). Rare.

*Pisidium variabile* Pme. Rare.

*Pisidium ventricosum* Pme. Common.

*Pisidium walkeri* var. *mainense* Sterki. Rare.

*Living shells in Barren Brook*, one quarter of a mile below the marl deposit, in a small pond on the brook, the land shells obtained at the water's edge.

*Succinea obliqua* Say. Rare.

*Succinea ovalis* Gld. Common.

*Succinea avara* Say. Rare.

*Strobilops labyrinthica* Say.

*Bifidaria pentodon* Say.

*Vertigo ventricosa* Morse.

*Conulus fulvus* Müll.

*Zonitoides arboreus* Say.

*Zonitoides exiguus* Stimp. Common.

*Carychium exile* Lea. Common.

*Physa heterostropha* Say. Rare and small.

*Limnæa desidiosa* Say. Small compared with the fossils.

*Planorbis trivolvis* Say. Abundant.

*Planorbis parvus* Say. Common.

*Planorbis crista* Linné, var. *cristata* Drap. Common.

*Anodonta fragilis* Lam. Rare.

*Sphærium simile* Say. Common in the brook below the pond.

*Sphærium rhomboideum* Say. One small living specimen.

*Pisidium abditum* Hald. Rare.

*Pisidium compressum* Prime. Few where the road crosses the brook.

*Pisidium rotundatum* Prime. Rare.

*Pisidium splendidulum* Sterki. Abundant; type locality.

*Pisidium variabile* Prime. Abundant.

*Pisidium seminulum* Sterki?. Few specimens referred to this species.

*Pisidium ventricosum* Prime. Common.

*Pisidium walkeri* var. *mainense*. Common.

*Fossils in the Marl Deposit in Lovely Brook Bog,  
Fort Fairfield, Aroostook County, Maine.*

- Physa heterostropha* Say. Large, specimens rare.  
*Limnæa desidiosa* Say.  
*Planorbis parvus* Say.  
*Planorbis hirsutus* Gld. Rare.  
*Planorbis crista* Linné, var. *cristata* Drap. One good specimen.  
*Pisidium variabile* Prime.  
*Pisidium abditum* Hald.  
*Pisidium splendidulum* Sterki.  
*Pisidium ventricosum* Prime.  
*Pisidium contortum* Prime.

*Living Shells in the Lovely Brook Bog.*

- Physa heterostropha* Say. Rare.  
*Limnæa desidiosa* Say. Rare.  
*Pisidium variabile* Prime. Common.  
*Pisidium ventricosum* Prime. Small but abundant, especially on the marl deposit.  
*Pisidium splendidulum* Sterki. Common and very variable.  
*Pisidium medianum* var. *minutum* Sterki. The type locality; small but very fine specimens.

*Pisidium contortum* Prime, so abundant among the fossils, is one of the rarest living *Pisidia*. Only a few specimens have been collected in Mud Lake, in the northeast corner of Perham, Aroostook County, Maine. It is dangerous to go near the water's edge, as the boggy shores break through and one sinks in the mud.

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PUBLICATIONS RECEIVED.

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CONTRIBUTIONS TO THE TERTIARY FAUNA OF FLORIDA, with especial reference to the *Silex* beds of Tampa and the Pliocene bed of the Caloosahatchie River; including in many cases a complete revision of the generic groups treated of and their American tertiary species. By WILLIAM HEALEY DALL, A. M. Transactions of the Free Institute of Science, Philadelphia, Vol. III, Part V, Dec., 1900.

This part contains about 270 pages, and 12 plates, treating of the families *Solenidæ*, *Donacidæ*, *Psammobiidæ*, *Semelidæ*, *Tellinidæ*,